

REMARKS

The Office Action of 01/09/2007 has been carefully considered. In response thereto, the claims have been amended as set forth above. Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

The addition of headings to the specification was requested. As such headings are not required and have in the past been known to affect the scope of protection afforded, Applicant respectfully declines.

Claim 1 was rejected as being unpatentable over Takatz. Claims 2-6, 10, 11, 15-17 and 20 were rejected as being unpatentable over Takatz in view of Shi. The remaining claims were rejected as being unpatentable over the same base combination further in view of various tertiary references. Claim 1 has been amended to more clearly distinguish over the Takatz. The remaining rejections are respectfully traversed.

Takatz addresses the same problem addressed by the present invention (preventing saturation of A/D converters in a radio receiver employing digital selectivity) but does so in a very different manner. In the present invention, as reflected now in claim 1 and as reflected in the remaining original claims, a wideband signal power estimate is obtained of total signal power reaching the A/D converter. Steps are then taken to prevent the total signal power reaching the A/D converter from exceeding a maximum allowable input amplitude.

Takatz does not obtain a wideband signal power estimate of total signal power reaching the A/D converter. Rather, Takatz relies on a *difference between two signal power variances*, a wideband signal power *variance* and a narrowband signal power *variance*.

The rejections rely on Shi to overcome this deficiency of Takatz. In particular, the Office Actions states in part:

Takatz...fails to teach the detecting wide-band signal power associated with a first threshold. Shi teaches...detecting a wide-band signal power...and, responsive thereto, reducing the gain of at least one amplifier coupled to an input terminal of the A/D converter...to avoid the intermodulation interference. Therefore, it would have been obvious...to upgrade Takatz with Shi's detecting of wide band signal power, such that the receive could avoid the intermodulation interference.

Applicant respectfully disagrees.

Takatz and Shi are examples of distinctly different receiver architectures. Takatz using a predominantly digital architecture ("direct-digital conversion") based on digital signal selectivity. Shi uses a predominantly analog architecture based on analog signal selectivity. The problems addressed by Takatz and Shi are also distinctly different. The problem of saturating the A/D converter does not arise in Shi, because Shi employs analog selectivity. The problem of saturating a mixer does not arise in Takatz, because Takatz employs digital selectivity.

Therefore, it would not have been obvious, absent hindsight, to combine the teachings of the references to arrive at the present invention.

Withdrawal of the rejections and allowance of claims 1-20 is respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "M. Ure", is written over a horizontal line.

Michael J. Ure, Reg. 33,089

Dated: 06/01/2007